

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1. (Currently amended) A computer-implemented method for diagnosing
2 performance in a database, the method comprising:
3 receiving information indicative of a set of rules classifying operations performed
4 in a database as one or more performance problems, each rule in the set of rules defining one or
5 more symptoms and at least one root performance problem;
6 determining one or more values that quantify an impact for the one or more
7 performance problem based on performance of operations in the database;
8 determining a first performance problem from the one or more performance
9 problems based on a matching between the one or more values for the one or more performance
10 problems and the one or more symptoms defined by at least one rule in the set of rules; and
11 generating information indicative of a recommendation for a solution for the first
12 performance problem.

1 2. (Currently amended) The method of claim 1, wherein the set of rules for
2 the one or more performance problems include symptoms and root problems, wherein symptoms
3 are analyzed to determine a root performance problem determining the first performance
4 problem from the one or more performance problems based on the matching comprises
5 automatically analyzing the one or more symptoms defined by the at least one rule based on the
6 one or more values to identify the root performance problem defined by the at least one rule as
7 the first performance problem.

1 3. (Currently amended) The method of claim 2, wherein [[the]] symptoms
2 defined by the set of rules are classified from a first set of performance problems to a second set
3 of performance problems.

1 4. (Currently amended) The method of claim 2, wherein generating the
2 information indicative of the recommendation for a solution comprises generating the
3 information to include [[any]] symptoms that were analyzed to determine the root performance
4 problem.

5. (Canceled)

1 6. (Previously presented) The method of claim 1, wherein the one or more
2 values comprising time values that quantify the impact of the one or more performance
3 problems.

1 7. (Previously presented) The method of claim 6, further comprising
2 determining the time values using at least one of a time model that classifies operations in the
3 database as wasteful operations and a wait model that classifies operations in the database
4 waiting for completion of one or more external events.

1 8. (Previously presented) The method of claim 1, wherein generating the
2 information indicative of the recommendation for the solution comprises:
3 determining one or more operations in the database that caused the first
4 performance problem; and
5 analyzing stored information for the one or more operations absent direct user
6 intervention to generate the information indicative of the recommendation for the solution.

1 9. (Original) The method of claim 8, wherein the stored information
2 comprises a snapshot of information for the one or more operations.

1 10. (Previously presented) The method of claim 1 further comprising
2 automatically determining the recommendation for the solution in response to determining the
3 first performance problem.

1 11. (Previously presented) The method of claim 1, further comprising:

2 determining a recommendation rule from a set of recommendation rules
3 associated with the first performance problem, each recommendation rule in the set of
4 recommendation rules indicative of at least one recommendation for a solution for the first
5 performance problem;
6 determining one or more operations that caused the first performance problem;
7 applying the recommendation rule to the one or more operations; and
8 determining a recommendation for the solution in response to a determination that
9 the one or more operations satisfy the recommendation rule.

1 12. (Original) The method of claim 1, further comprising outputting the
2 recommendation for the solution.

1 13. (Previously presented) The method of claim 1, further comprising
2 generating information specifying one or more operations performed in the database that are not
3 causing performance problems.

1 14. (Currently amended) A computer-implemented method for diagnosing
2 one or more performance problems in a database, the method comprising:
3 receiving information from a user specifying a set of rules classifying operations
4 performed in a database into one or more performance problems, each rule in the set of rules
5 defining one or more symptoms and at least one root performance problem;
6 collecting information that quantifies an impact for one or more operations
7 performed in the database;
8 associating the information for one or more operations with the one or more
9 performance problems classified by the set of rules;
10 analyzing the associated information for the one or more performance problems
11 based on [[a]] the set of rules classifying operations performed in [[a]] the database into the one
12 or more performance problems to determine a first performance problem from the one or more
13 performance problems; and

14 generating information indicative of a recommendation for a solution for the first
15 performance problem.

1 15. (Currently amended) The method of claim 14, wherein collecting
2 information comprises:
3 determining when one or more operations that are associated with the one or more
4 performance problems are being performed; and
5 timing the one or more operations that are associated with the one or more
6 performance problems to generate one or more time values for the one or more operations that
7 quantify the impact of the one or more operations.

1 16. (Currently amended) The method of claim 15, wherein the one or more
2 operations that are associated with the one or more performance problems are determined based
3 on at least one of a time model that classifies a first set of operations in the database as wasteful
4 operations and a wait model that classifies a second set of operations in the database waiting for
5 completion of one or more external events.

1 17. (Currently amended) The method of claim 14, wherein ~~the set of rules for~~
2 ~~the one or more performance problems include symptoms and root problems, wherein symptoms~~
3 ~~are analyzed to determine a root performance problem~~ analyzing the associated information for
4 the one or more performance problems based on the set of rules classifying operations performed
5 in the database into the one or more performance problems to determine the first performance
6 problem from the one or more performance problems comprises automatically analyzing the
7 symptoms defined by at least one rule in the set of rules to identify the root performance problem
8 defined by the at least one rule as the first performance problem.

1 18. (Currently amended) The method of claim 17, wherein generating the
2 information indicative of the recommendation for ~~[[the]]~~ a solution comprises generating the
3 information to include ~~[[any]]~~ symptoms that were analyzed to determine the root performance
4 problem.

19. (Canceled)

1 20. (Previously presented) The method of claim 14, wherein generating the
2 information indicative of the recommendation for the solution comprises:

3 determining one or more operations in the database that caused the first
4 performance problem; and

5 reviewing stored information for the one or more operations to generate the
6 information indicative of the recommendation for the solution.

1 21. (Original) The method of claim 20, wherein the stored information
2 comprises a snapshot of information for the one or more operations.

1 22. (Previously presented) The method of claim 14, further comprising
2 automatically determining the recommendation for the solution in response to determining the
3 first performance problem.

1 23. (Previously presented) The method of claim 14, further comprising:
2 determining a recommendation rule from a set of recommendation rules
3 associated with the first performance problem, each recommendation rule in the set of
4 recommendation rules indicative of at least one recommendation for a solution to the first
5 performance problem;

6 determining one or more operations that caused the first performance problem;
7 applying the recommendation rule to the one or more operations; and
8 determining a recommendation for the solution in response to a determination that
9 the one or more operations satisfy the recommendation rule.

1 24. (Original) The method of claim 14, further comprising outputting the
2 recommendation for the solution.

1 25. (Previously presented) The method of claim 14, further comprising
2 generating information specifying one or more operations performed in the database that are not
3 causing performance problems.

1 26. (Currently amended) A ~~computer program product stored on a computer-~~
2 readable medium configured to store a set of code module which when executed by a processor
3 of a computer system become operational with the processor for diagnosing performance in a
4 database, the ~~computer program product~~ computer-readable medium comprising:

5 code for receiving information indicative of a set of rules classifying operations
6 performed in a database as one or more performance problems, each rule in the set of rules
7 defining one or more symptoms and at least one root performance problem;

8 code for determining one or more values that quantify an impact for the one or
9 more performance problems based on performance of operations in the database;

10 code for determining a first performance problem from the one or more
11 performance problems based on a matching between the one or more values for the one or more
12 performance problems and the one or more symptoms defined by at least one rule in the set of
13 rules; and

14 code for generating information indicative of a recommendation for a solution for
15 the performance problem.

1 27. (Currently amended) The ~~computer program product~~ computer-readable
2 medium of claim 26, further comprising code for automatically determining the recommendation
3 for the solution ~~comprises code~~ in response to determining the first performance problem.

1 28. (Currently amended) The ~~computer program product~~ computer-readable
2 medium of claim 26, further comprising:

3 code for determining a recommendation rule from a set of recommendation rules
4 associated with the first performance problem, each recommendation rule in the set of

5 recommendation rules indicative of at least one recommendation for a solution for the first
6 performance problem;
7 code for determining one or more operations that caused the first performance
8 problem;
9 code for applying the recommendation rule to the one or more operations; and
10 code for determining a recommendation for the solution in response to a
11 determination that the one or more operations satisfy the recommendation rule.

1 29. (Previously presented) A ~~computer program product stored on a~~
2 computer-readable medium configured to store a set of code modules which when executed by a
3 processor of a computer system become operational with the processor for diagnosing one or
4 more performance problems in a database, the ~~computer program product~~ computer-readable
5 medium comprising:

6 code for receiving information from a user specifying a set of rules classifying
7 operations performed in a database into one or more performance problems, each rule in the set
8 of rules defining one or more symptoms and at least one root performance problem;

9 code for collecting information that quantifies an impact for one or more
10 operations performed in the database;

11 code for associating the information for one or more operations with the one or
12 more performance problems classified by the set of rules;

13 code for analyzing the associated information for the one or more performance
14 problems based on [[a]] the set of rules classifying operations performed in the database into the
15 one or more performance problems to determine a performance problem from the one or more
16 performance problems; and

17 code for generating information indicative of a recommendation for a solution for
18 the performance problem.

1 30. (Currently amended) The ~~computer program product~~ computer-readable
2 medium of claim 29, wherein code for collecting information comprises:

3 code for determining when one or more operations that are associated with the
4 one or more performance problems are being performed; and

5 code for timing the one or more operations that are associated with the one or
6 more performance problems to generate one or more time values for the operations that quantify
7 the impact of the operations.

1 31. (Currently amended) The ~~computer program product~~ computer-readable
2 medium of claim 29, wherein code for generating the information indicative of the
3 recommendation for the solution comprises:

4 code for determining one or more operations in the database that caused the
5 performance problem; and

6 code for reviewing stored information for the one or more operations absent direct
7 user intervention to generate the information indicative of the recommendation for the solution.

1 32. (Currently amended) The ~~computer program product~~ computer-readable
2 medium of claim 29, further comprising code for automatically determining the recommendation
3 for the solution in response to determining the performance problem.

1 33. (Currently amended) The ~~computer program product~~ computer-readable
2 medium of claim 29, further comprising:

3 code for determining a recommendation rule from a set of recommendation rules
4 associated with the determined performance problem, each recommendation rule in the set of
5 recommendation rules indicative of at least one recommendation for a solution to the determined
6 performance problem;

7 code for determining one or more operations that caused the performance
8 problem;

9 code for applying the recommendation rule to the one or more operations; and

10 code for determining a recommendation for the solution in response to a
11 determination that the one or more operations satisfy the recommendation rule.